

REMARKS

These remarks are in response to the final Office Action mailed September 8, 2004. Claims 1 to 51 are pending. Claims 1 to 3, 5, 7, 13 to 47, 50 and 51 have been cancelled without prejudice. Applicants maintain the right to prosecute any of the cancelled claims in any related application claiming the benefit of priority of the subject application. Claims 4, 6, 8 to 12, 48 and 49 are therefore under consideration.

Applicants thank the Examiner for the Interview. The amendments conform the claims with the subject matter indicated to be allowable by the Examiner in the Interview and in the final Office Action mailed September 8, 2004. Applicants respectfully request entry of the amendments and remarks because the amendments place the claims in better condition for allowance or for consideration on appeal.

Regarding the Amendments

The claim amendments were made to address various informalities or are supported throughout the specification. In particular, the amendment to claims 4 and 6 to recite "[a]n isolated nucleic acid molecule encoding a human Rhesus D antigen contributing to or indicative of the weak D phenotype, said nucleic acid molecule carrying at least one missense mutation, as compared to wild type Rhesus D antigen set forth as SEQ ID NO:41," was made in view of the cancellation of claim 1. The amendment to claims 4, 6, 8 and 49 to recite either "of the amino acid sequence encoded by SEQ ID NO:41 (Figure 2)" or "with reference to SEQ ID NO:41" was made in order to more clearly indicate the sequence to which the recited positions refer. The amendment to claim 6 to recite "or a combination of said missense mutations" is supported, for example, by claim 3, as originally filed. The remaining amendments to claims 8 to 10, 48 and 49 provide correct claim dependencies, antecedent basis or greater clarity and, therefore, were made to address informalities. Thus, as the amendments were made to address various informalities or are supported by the specification, no new matter has been added. Furthermore, as the amendments place the claims in better condition for allowance or for consideration on appeal, entry thereof is respectfully requested.

European Priority Application, EP 98 101203.2

Submitted herewith is a certified copy of European Application No. EP 98 101203.2, filed January 23, 1998. Applicants respectfully request that the certified copy be entered into the record, and that in view of the perfection of the priority claim to the January 23, 1998, filing date of European Application No. EP 98 101203.2, that the priority claim be acknowledged as requested in the Petition for Corrected Filing Receipt, filed October 13, 2004.

I. REJECTIONS UNDER 35 U.S.C. §112, FIRST PARAGRAPH

The rejection of claims 1 to 5, 7, 9 to 12, 14, 48, 50 and 51 under 35 U.S.C. §112, first paragraph, as allegedly lacking enablement is respectfully traversed. The Examiner maintains that the specification allegedly does not enable the full scope of the claims.

The specification adequately enables the claims for the reasons of record. Nevertheless, solely in order to further prosecution of the application and without acquiescing to the propriety of the rejection, claims 1 to 3, 5, 7, 13 to 47, 50 and 51 have been cancelled, and claims 4, 6, 8 to 10, 48 and 49 have been amended as set forth above.

In view of the amendments to claims 4, 6, 8 to 10, 48 and 49, that the Examiner has indicated in the record that claims 6, 8 and 49 would be allowable if rewritten to be independent, and that the Examiner further indicated in the Interview that the claims, if amended as set forth above would be allowable, the grounds for rejection are moot. Consequently, claims 4, 6, 8 to 10, 48 and 49 are adequately enabled and the rejection under 35 U.S.C. §112, first paragraph, is requested to be withdrawn.

The rejection of claims 1 to 5, 7, 9 to 12, 14, 48, 50 and 51 under 35 U.S.C. §112, first paragraph, as allegedly lacking an adequate written description, is respectfully traversed. The Examiner maintains the rejection for the reasons of record.

Claims 1 to 5, 7, 9 to 12, 14, 48, 50 and 51 are adequately described for the reasons of record. Nevertheless, solely in order to further prosecution of the application and without acquiescing to the propriety of the rejection, claims 1 to 3, 5, 7, 13 to 47, 50 and 51 have been cancelled and claims 4, 6, 8 to 10, 48 and 49 have been amended as set forth above.

In view of the amendments to claims 4, 6, 8 to 10, 48 and 49, that the Examiner has indicated in the record that claims 6, 8 and 49 would be allowable if rewritten to be independent, and that the Examiner further indicated in the Interview that the claims, if amended as set forth above would be allowable, the grounds for rejection are moot. Consequently, an adequate written description of claims 4, 6, 8 to 10, 48 and 49 is provided and the rejection under 35 U.S.C. §112, first paragraph, is requested to be withdrawn.

II. REJECTIONS UNDER 35 U.S.C. §102 and 103(a)

The rejection of claims 1, 3 to 5, 9, 12, 50 and 51 under 35 U.S.C. §102(a) as allegedly anticipated by Legler *et al.* (Transfusion 38:434 (1998)) is respectfully traversed. The Examiner indicates that Legler *et al.* allegedly describe “a polynucleotide that encodes a human Rhesus D antigen contributing to or indicative of the weak D phenotype....,” and that allegedly “the priority date of instant application is December 18, 1998.” [see Office Action, page 15]

The cited Legler *et al.* reference was published in May 1998. The subject application has a priority date of January 23, 1998, for the claimed subject matter, for the reasons set forth in the Petition for Corrected Filing Receipt, filed October 13, 2004. As evidence that Applicants are entitled to the benefit of January 23, 1998, priority date, submitted herewith is a certified copy of European Application No. EP 98 101203.2, filed January 23, 1998, which discloses the claimed subject matter.

In view of the fact that the claimed subject matter is disclosed in European Application No. EP 98 101203.2, and that the cited Legler *et al.* reference was published after the filing of European Application No. EP 98 101203.2, Legler *et al.* (Transfusion 38:434 (1998)) is not available as prior art against any claims of the subject application. Accordingly, as Legler *et al.* is not available as prior art against any claims of the subject application, the rejection under 35 U.S.C. §102(a) over Legler *et al.* (Transfusion 38:434 (1998)) is improper and must be withdrawn.

The rejection of claims 1, 2 and 10 to 12 under 35 U.S.C. §103(a) as allegedly unpatentable over Legler *et al.* in view of Sambrook *et al.* (Molecular Cloning, 1989, Cold Spring Harbor Laboratory, CSH, NY, Ch. 17) is respectfully traversed. The Examiner indicates

that the secondary reference (Sambrook *et al.*) adds the limitations missing from Legler *et al.*, thereby allegedly rendering these claims obvious.

As set forth above, Legler *et al.* (Transfusion 38:434 (1998)) was published in May 1998. The subject application has a priority date of January 23, 1998, for the claimed subject matter, as evidenced by the certified copy of European Application No. EP 98 101203.2. In view of the fact that Legler *et al.* (Transfusion 38:434 (1998)) was published after the January 23, 1998, filing of European Application No. EP 98 101203.2, Legler *et al.* is not available as prior art against any claims of the subject application. Accordingly, as Legler *et al.* is not available as prior art against any claims of the subject application, Legler *et al.* (Transfusion 38:434 (1998)) can not be cited under 35 U.S.C. §103.

The claims would not have been obvious in view of Sambrook *et al.* alone. Here, Sambrook *et al.*, *inter alia*, fail to teach or suggest a nucleic acid molecule encoding a human Rhesus D antigen, nor a nucleic acid molecule encoding a human RHD antigen having a missense mutation. Thus, Sambrook *et al.* fail to teach or suggest the claimed nucleic acid molecules, vectors or methods. Absent the requisite teaching or suggestion, the claims would not have been obvious in view of Sambrook *et al.* at the time of the invention. Accordingly, Applicants respectfully request that the rejection under 35 U.S.C. §103(a) be withdrawn.

CONCLUSION

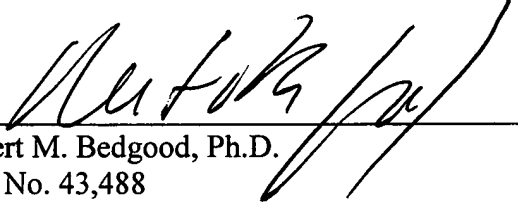
In summary, for the reasons set forth herein, Applicants maintain that claims 4, 6, 8 to 12, 48 and 49 clearly and patentably define the invention, respectfully request that the Examiner reconsider the various grounds set forth in the Office Action, and respectfully request the allowance of the claims which are now pending.

If the Examiner would like to discuss any of the issues raised in the Office Action, Applicant's representative can be reached at (858) 509-4065.

Please charge any additional fees, or make any credits, to Deposit Account No. 50-2212.

Respectfully submitted,

Date: 2-23-05


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